

0590  
1231

# 14



OIKE

ENTERED

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/024,444B

DATE: 01/16/2003<sup>86</sup>

TIME: 13:09:24

Input Set : A:\21402-224AG.txt

Output Set: N:\CRF4\01162003\J024444B.raw

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3 <110> APPLICANT: Padigaru, Muralidhara
4   Gerlach, Valerie L.
5   Smithson, Glennnda
6   Stone, David
7   Bin-Yang, Ruey
8   Conley, Pamela B.
9   Hart, Matthew
10  Tomlinson, James E.
11  Topper, James N.
12  Kekuda, Ramesh
13  Casman, Stacie J.
14  MacDougall, John R.
15  Shlomit, Edinger R.
17 <120> TITLE OF INVENTION: Novel GPCR-Like Proteins and Nucleic Acids Encoding
18   Same
20 <130> FILE REFERENCE: 21402-224 AG
22 <140> CURRENT APPLICATION NUMBER: 10/024444B
C--> 23 <141> CURRENT FILING DATE: 2002-12-19
25 <150> PRIOR APPLICATION NUMBER: 60/256635
26 <151> PRIOR FILING DATE: 2000-12-18
28 <160> NUMBER OF SEQ ID NOS: 12
30 <170> SOFTWARE: PatentIn Ver. 2.1
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33 <211> LENGTH: 977
34 <212> TYPE: DNA
35 <213> ORGANISM: Human
37 <400> SEQUENCE: 1
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40 atacatgttg gcactgacca gcaatggtct gctgctcctg gccatcacca tagaagcccg 180
41 gctccacatg cccatgtacc tcctgcttgg gcagctctct ctcatggacc tcctgttcac 240
42 atctgttgtc actcccaagg ccttggcgga ctttctgcgc agagaaaaca ctatctcctt 300
43 tggaggctgt gcacttcaga tgttcctggc actgacaatg ggtagcgtg aggacctcct 360
44 actggccttc atggcctatg acaggatatg ggccatttgt catcctctga aatacatgac 420
45 cctcatgagc ccaagagtct gctggatcat ggtggccaca tcctggatcc tggcatccct 480
46 gatttgctata ggacatacca tgtacactat gcacctccct ttctgtgtgt cctgggaaat 540
47 caggcatctg ctctgtgaga tcccaccctt gctgaagtgt gcctgtgctg atacctccag 600
48 gtatgagctt ataataatag tgacagggtg gactttcctc ttgctcccca tttctgccat 660
49 tgtggcctcc tacacactag tcctattcac tgtgcttcgt atgccatcaa atgaggggag 720
50 gaagaaagcc ctgttcacct gctcttccca cctgattgtg gtcgggatgt tctatggagc 780
51 tgccacattc atgtatgtct tgcccagttc cttccacagc cccaaacaag acaacatcat 840
52 ctctgttttc tacacaattg tcaactccag cctgaatcca ctcatctaca gcctgaggaa 900
53 taaggagggtc atgcgggcct tgaggagggt cctgggaaaa tacatactgc tggcacattc 960

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## RAW SEQUENCE LISTING

DATE: 01/16/2003

PATENT APPLICATION: US/10/024,444B

TIME: 13:09:24

Input Set : A:\21402-224AG.txt

Output Set: N:\CRF4\01162003\J024444B.raw

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64 1 5 10 15  
66 Ile Leu Asn Asp Ser Gly Ser Pro Glu Leu Leu Tyr Ala Thr Phe Thr  
67 20 25 30  
69 Ile Leu Tyr Met Leu Ala Leu Thr Ser Asn Gly Leu Leu Leu Ala  
70 35 40 45  
72 Ile Thr Ile Glu Ala Arg Leu His Met Pro Met Tyr Leu Leu Leu Gly  
73 50 55 60  
75 Gln Leu Ser Leu Met Asp Leu Leu Phe Thr Ser Val Val Thr Pro Lys  
76 65 70 75 80  
78 Ala Leu Ala Asp Phe Leu Arg Arg Glu Asn Thr Ile Ser Phe Gly Gly  
79 85 90 95  
81 Cys Ala Leu Gln Met Phe Leu Ala Leu Thr Met Gly Ser Ala Glu Asp  
82 100 105 110  
84 Leu Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His  
85 115 120 125  
87 Pro Leu Lys Tyr Met Thr Leu Met Ser Pro Arg Val Cys Trp Ile Met  
88 130 135 140  
90 Val Ala Thr Ser Trp Ile Leu Ala Ser Leu Ile Ala Ile Gly His Thr  
91 145 150 155 160  
93 Met Tyr Thr Met His Leu Pro Phe Cys Val Ser Trp Glu Ile Arg His  
94 165 170 175  
96 Leu Leu Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr  
97 180 185 190  
99 Ser Arg Tyr Glu Leu Ile Ile Tyr Val Thr Gly Val Thr Phe Leu Leu  
100 195 200 205  
102 Leu Pro Ile Ser Ala Ile Val Ala Ser Tyr Thr Leu Val Leu Phe Thr  
103 210 215 220  
105 Val Leu Arg Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr  
106 225 230 235 240  
108 Cys Ser Ser His Leu Ile Val Val Gly Met Phe Tyr Gly Ala Ala Thr  
109 245 250 255  
111 Phe Met Tyr Val Leu Pro Ser Ser Phe His Ser Pro Lys Gln Asp Asn  
112 260 265 270  
114 Ile Ile Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu  
115 275 280 285  
117 Ile Tyr Ser Leu Arg Asn Lys Glu Val Met Arg Ala Leu Arg Arg Val  
118 290 295 300  
120 Leu Gly Lys Tyr Ile Leu Leu Ala His Ser Thr Leu  
121 305 310 315  
124 <210> SEQ ID NO: 3  
125 <211> LENGTH: 316  
126 <212> TYPE: PRT

## RAW SEQUENCE LISTING

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TIME: 13:09:24

Input Set : A:\21402-224AG.txt

Output Set: N:\CRF4\01162003\J024444B.raw

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129 <400> SEQUENCE: 3
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133 Ile Leu Asn Asp Ser Gly Ser Pro Glu Leu Leu Cys Ala Thr Ile Thr
134           20           25           30
136 Ile Leu Tyr Leu Leu Ala Leu Ile Ser Asn Gly Leu Leu Leu Leu Ala
137           35           40           45
139 Ile Thr Met Glu Ala Arg Leu His Met Pro Met Tyr Leu Leu Leu Gly
140           50           55           60
142 Gln Leu Ser Leu Met Asp Leu Leu Phe Thr Ser Val Val Thr Pro Lys
143   65           70           75           80
145 Ala Leu Ala Asp Phe Leu Arg Arg Glu Asn Thr Ile Ser Phe Gly Gly
146           85           90           95
148 Cys Ala Leu Gln Met Phe Leu Ala Leu Thr Met Gly Gly Ala Glu Asp
149           100          105          110
151 Leu Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
152           115          120          125
154 Pro Leu Thr Tyr Met Thr Leu Met Ser Ser Arg Ala Cys Trp Leu Met
155           130          135          140
157 Val Ala Thr Ser Trp Ile Leu Ala Ser Leu Ser Ala Leu Ile Tyr Thr
158 145           150          155          160
160 Val Tyr Thr Met His Tyr Pro Phe Cys Arg Ala Gln Glu Ile Arg His
161           165          170          175
163 Leu Leu Cys Glu Ile Pro His Leu Leu Lys Val Ala Cys Ala Asp Thr
164           180          185          190
166 Ser Arg Tyr Glu Leu Met Val Tyr Val Met Gly Val Thr Phe Leu Ile
167           195          200          205
169 Pro Ser Leu Ala Ala Ile Leu Ala Ser Tyr Thr Gln Ile Leu Leu Thr
170           210          215          220
172 Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
173 225           230          235          240
175 Cys Ser Ser His Leu Thr Val Val Gly Met Phe Tyr Gly Ala Ala Thr
176           245          250          255
178 Phe Met Tyr Val Leu Pro Ser Ser Phe His Ser Thr Arg Gln Asp Asn
179           260          265          270
181 Ile Ile Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
182           275          280          285
184 Ile Tyr Ser Leu Arg Asn Lys Glu Val Met Arg Ala Leu Arg Arg Val
185           290          295          300
187 Leu Gly Lys Tyr Met Leu Pro Ala His Ser Thr Leu
188 305           310          315
191 <210> SEQ ID NO: 4
192 <211> LENGTH: 316
193 <212> TYPE: PRT
194 <213> ORGANISM: mouse
196 <400> SEQUENCE: 4
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198   1           5           10           15

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DATE: 01/16/2003

PATENT APPLICATION: US/10/024,444B

TIME: 13:09:24

Input Set : A:\21402-224AG.txt

Output Set: N:\CRF4\01162003\J024444B.raw

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200 Ile Leu Asn Gly Ser Ser Ser Pro Glu Leu Leu Cys Ala Ile Val Thr
201           20           25           30
203 Ala Leu Tyr Met Leu Ala Leu Ile Ser Asn Gly Leu Leu Leu Leu Val
204           35           40           45
206 Ile Thr Val Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Leu Arg
207           50           55           60
209 Gln Leu Ser Leu Ile Asp Leu Leu Phe Thr Ser Val Val Thr Pro Lys
210           65           70           75           80
212 Ala Val Met Asp Phe Leu Leu Arg Asp Asn Thr Ile Ser Phe Gly Gly
213           85           90           95
215 Cys Ala Leu Gln Met Ala Leu Ala Leu Met Leu Gly Ser Ala Glu Asp
216           100          105          110
218 Leu Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
219           115          120          125
221 Pro Leu Asn Tyr Met Val Phe Met Ser Pro Thr Val Cys Trp Leu Ile
222           130          135          140
224 Val Ser Thr Ser Trp Ile Leu Ala Ser Leu Thr Ala Val Gly His Thr
225          145          150          155          160
227 Val Tyr Thr Met His Phe Pro Phe Cys Met Ser Gln Glu Ile Arg His
228           165          170          175
230 Leu Leu Cys Glu Ile Leu Pro Leu Leu Lys Leu Ser Cys Val Asp Thr
231           180          185          190
233 Ser Gln Tyr Glu Leu Met Val Tyr Val Thr Gly Val Thr Phe Leu Leu
234           195          200          205
236 Leu Pro Leu Ser Ala Ile Val Thr Ser Tyr Thr Leu Ile Leu Ser Thr
237           210          215          220
239 Val Leu His Met Pro Ser Asn Glu Gly Lys Lys Lys Ala Leu Val Thr
240          225          230          235          240
242 Cys Leu Ser His Leu Met Val Val Gly Met Phe Tyr Gly Ala Ala Thr
243           245          250          255
245 Phe Met Tyr Val Leu Pro Ser Ser Leu His Ser Ala Lys Gln Asp Asn
246           260          265          270
248 Ile Ile Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
249           275          280          285
251 Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Leu Arg Arg Val
252           290          295          300
254 Leu Gly Arg Tyr Ile Leu Pro Ala His Leu Thr Leu
255          305          310          315
258 <210> SEQ ID NO: 5
259 <211> LENGTH: 316
260 <212> TYPE: PRT
261 <213> ORGANISM: mouse
263 <400> SEQUENCE: 5
264 Met Glu Pro Trp Asn Ser Thr Leu Glu Ser Gly Phe Ile Leu Val Gly
265           1           5           10           15
267 Ile Leu Asp Gly Ser Gly Ser Pro Glu Leu Leu Cys Ala Thr Val Thr
268           20           25           30
270 Thr Leu Tyr Met Leu Ala Leu Ile Ser Asn Gly Leu Leu Leu Leu Val
271           35           40           45

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PATENT APPLICATION: US/10/024,444B

TIME: 13:09:24

Input Set : A:\21402-224AG.txt

Output Set: N:\CRF4\01162003\J024444B.raw

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273 Ile Thr Val Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Leu Arg
274      50                      55                      60
276 Gln Leu Ser Leu Ile Asp Leu Leu Phe Thr Ser Val Val Thr Pro Asn
277 65                      70                      75                      80
279 Thr Val Val Asp Phe Leu Leu Arg Asp Asn Thr Ile Ser Phe Glu Gly
280                      85                      90                      95
282 Cys Ala Leu Gln Leu Phe Ser Ala Met Thr Leu Gly Gly Ala Glu Asp
283                      100                     105                     110
285 Leu Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
286                      115                     120                     125
288 Pro Leu Asn Tyr Met Ile Phe Met Ser Pro Lys Ala Cys Arg Leu Met
289                      130                     135                     140
291 Val Ala Ile Ser Trp Ile Leu Ala Ser Leu Ser Ala Leu Gly His Thr
292 145                      150                      155                      160
294 Val Tyr Thr Met His Phe Pro Phe Cys Met Ser Gln Glu Ile Arg His
295                      165                      170                      175
297 Leu Leu Cys Glu Val Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr
298                      180                      185                      190
300 Ser Gln Tyr Glu Leu Met Val Tyr Val Thr Gly Val Ile Phe Leu Leu
301                      195                      200                      205
303 Leu Pro Leu Ser Ala Ile Ile Thr Ser Tyr Ser Leu Ile Leu Phe Thr
304                      210                      215                      220
306 Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
307 225                      230                      235                      240
309 Cys Ser Ser His Leu Thr Val Val Gly Met Phe Tyr Gly Gly Ala Thr
310                      245                      250                      255
312 Phe Met Tyr Val Leu Pro Ser Ser Phe His Ser Pro Lys Gln Asp Asn
313                      260                      265                      270
315 Ile Ile Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
316                      275                      280                      285
318 Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Val Arg Arg Val
319                      290                      295                      300
321 Leu Gly Arg His Ile Leu Pro Ala His Ala Thr Val
322 305                      310                      315
325 <210> SEQ ID NO: 6
326 <211> LENGTH: 316
327 <212> TYPE: PRT
328 <213> ORGANISM: mouse
330 <400> SEQUENCE: 6
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332 1                      5                      10                      15
334 Ile Leu Asp Gly Ser Gly Ser Pro Glu Leu Leu Cys Ala Thr Val Thr
335                      20                      25                      30
337 Thr Leu Tyr Met Leu Ala Leu Ile Ser Asn Gly Leu Leu Leu Leu Val
338                      35                      40                      45
340 Ile Thr Val Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Leu Arg
341                      50                      55                      60
343 Gln Leu Ser Leu Ile Asp Leu Leu Phe Thr Ser Val Val Thr Pro Asn
344 65                      70                      75                      80

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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 01/16/2003  
PATENT APPLICATION: US/10/024,444B      TIME: 13:09:25

Input Set : A:\21402-224AG.txt  
Output Set: N:\CRF4\01162003\J024444B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:8; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,14,15,16,17

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/024,444B

DATE: 01/16/2003

TIME: 13:09:25

Input Set : A:\21402-224AG.txt

Output Set: N:\CRF4\01162003\J024444B.raw

L:23 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0

L:556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:16